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ATTACHMENT A

AMAT DOCKET NO: 008716 USA/CPS/IBSS/LAP

TITLE: CLEANING AND REFURBISHING CHAMBER COMPONENTS HAVING METAL COATINGS

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KEY WORDS: process chamber component, metal coating, refurbish, bead blasting

ABSTRACT:

A component of a process chamber is refurbished and cleaned to remove an intermetallic compound from the component. The component has a structure having a coating that includes a first metal layer over the intermetallic compound. To refurbish the component, the first metal layer is removed to form an exposed surface that at least partially includes the intermetallic compound. The exposed surface is bead blasted in a penetrative bead blasting step by propelling blasting beads having a bead diameter of less than about 180 micrometers with a gas that is pressurized to a pressure of less than about 310 kPa (45 psi), towards the exposed surface, thereby removing the intermetallic compound from the exposed surface of the structure to form a cleaned surface. A second metal layer is then formed over the cleaned surface.

DRAWING:

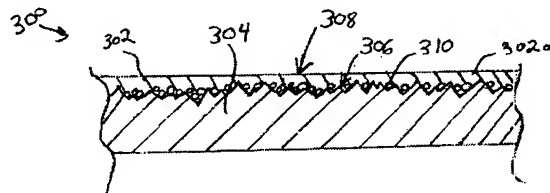


Figure 1a

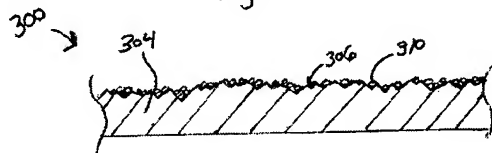


Figure 1b

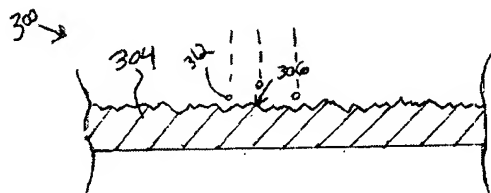


Figure 1c

CLAIM:

1. A method of refurbishing a component of a process chamber, the component comprising a structure having a coating comprising a first metal layer over an intermetallic compound, the method comprising:
 - (a) removing the first metal layer to form an exposed surface that at least partially comprises the intermetallic compound;
 - (b) performing a penetrative bead blasting step by propelling blasting beads having a bead diameter of less than about 180 micrometers with a gas that is pressurized to a pressure of less than about 310 kPa towards the exposed surface, thereby removing the intermetallic compound from the exposed surface of the structure to form a cleaned surface; and
 - (c) forming a second metal layer over the cleaned surface.